

**Claims:**

1. A coin operated amusement device comprising:  
a container for storing a plurality of prizes, said container having a  
5 transparent window area, a play field surface for supporting said plurality of  
prizes;  
an engagement device for engaging said prizes and transferring said prizes  
to an area that is accessible to a player,  
said engagement device comprising a controller for orienting an  
10 engagement means at a desired location and for activating said engagement means  
for engaging and disengaging prizes at predetermined times,  
user input means for controlling the position of the engagement means  
over a play field, and  
play field elevation means for moving the play field vertically within said  
15 container.
2. The amusement device recited in claim 1 wherein the play field  
elevation means comprises a drive system including a motor, a nut having internal  
threads, a rod having opposite threads received in said nut, said nut being coupled  
20 to said motor to rotate said nut causing said threaded rod to move when said motor  
is actuated, the rotation of the threaded nut imparting a linear movement to said  
threaded rod and said threaded rod imparting a driving force on said play field in the  
vertical direction.
3. The amusement device recited in claim 2 further comprising motor  
controlling means for actuating the motor that moves the play field in response to  
25 predetermined criteria.
4. The amusement device recited in claim 3 further comprising a sensor  
for indicating when the level of prizes in the container are diminished below a  
predetermined level, and wherein the motor controlling means actuates the motor  
that moves said play field to raise said play field in response to a signal from said  
30 sensor that indicates when the prize level has decreased below said predetermined  
level.

5. The amusement device of claim 4 wherein the motor controlling means actuates the play field adjustment motor after a predetermined number of times that a prize has been awarded.
6. The game amusement device of claim 1 wherein said engagement device comprises a claw member suspended from an overhead track.
7. An improved amusement device having a plurality of prizes in a container and a claw for extracting the prizes, the improvement comprising:
  - 10 a system for opening and closing arms of an engagement device, said system comprising a an air pump, a hose connecter to said air pump and an air cylinder, said cylinder having a chamber having an displaceable end wall, said end wall connected to a piston, and said a piston in engagement with a control member, said control member in engagement with said arms in manner to allow for the application of force on said proximate end, wherein said arms will pivot on a point and move in response to said force on said proximate end, and
  - 15 a valve for releasing pressure in the system and control means for the controlling the opening and closing of said value at predetermined times.
8. An improved crane amusement device having a plurality of prizes on a play field in an enclosed container and an engagement device for extracting the prizes, wherein said engagement device is suspended over said prizes and is lowered to engage said prizes, said improvement comprising:
  - 20 control means for rotating said engagement device with respect to said play field wherein the player is provided input means to rotate said engagement device to pivot and thus alter the orientation of the engagement device with respect to the play field.
  - 25 9. An improved crane amusement device having a plurality of prizes on a play field in an enclosed container and an engagement device for extracting the prizes, wherein said engagement device is suspended over said prizes and is lowered to engage said prizes, and said play can control the location on an X and Y tracks,
  - 30 said improvement comprising, input relating to the location of said engagement device for a processing unit, wherein said processing unit can track the location of said engagement device in an X Y and a Z axis.

10. The crane device recited in claim 9 wherein said input is provided by stepper motors that drive said engagement device in an X, Y and Z directions.
11. The crane device recited in claim 9 wherein said input is provided by an encoded shafts on motors that drive said engagement device in an X Y and Z direction and optical sensors, said optical sensors proving output signals in response reading the matter encoded on said motor shafts, said signals transmitted to a processing unit for processing.  
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